Multifactorial Fall Prevention in Older Adults

Kaitlin Zonneveld

OTAGO POLYTECHNIC
Te Kura Matatini ki Otago

Introduction

Fall prevention is globally recognised as a major health priority. With an ageing population, interventions to decrease the amount of falls in older adult patients is vital. An ageing population places huge burden on healthcare systems as older adults are at increased risk of falls due to a declination of body system functions (Savavanakumar et al., 2014). Extensive research has been done surrounding fall prevention strategies and interventions. Common themes throughout literature are patient education. rehabilitation therapies, medication management and environmental factors.

Research question: "In older adults aged over 65 years, who are a falls risk, does a multifactorial falls prevention programme decrease the number of falls in a hospital setting, within 12 months?"

Literature Review

Patient Education - Educational techniques should be less than 30 minutes and should provide specific, individualised information to the patient (Simpson, Rosenthal, Cumbler & Likosky, 2013).

Rehabilitation Therapies - Strength and balance training in particular. Not effective as a single intervention; needs to be incorporated into a multifactorial fall prevention programme in order to have any affect (Savavanakumar et al., 2014).

Medication Management - Essential part of fall prevention and intervention (Groarke, 2012). as some medications such as benzodiazepines increase a person's susceptibility to falls (Simpson et al., 2013).

Environmental Factors - (extrinsic factors) Include home safety, i.e replacement or modification of falls hazards.

These interventions are ineffective when used individually, however, when they are all incorporated into one multifactorial falls prevention programme research shows that the incidence of falls among older adults decreases.

Recommendations

- A multifactorial falls prevention programme must be constructed in a way that is specific to the patient that is at risk of falling (Simpson et al., 2013).
- In order for the multifactorial falls prevention programme to be successful an in-depth assessment of the patient must be undertaken before intervention. Such assessment includes, history of falls, what medication that patient is taking, and medical conditions that could put the patient at risk of falling. Physical examination and a functional assessment of activities of daily living are also required (Groarke, 2013).
- Nurses require knowledge in order to educate their patient and their family surrounding fall prevention and intervention (Oliveria, Sandos, Kerber, Francion & Cruz, 2015).

Conclusion

In conclusion, a multi-factorial fall prevention programme is an effective way of reducing the number falls in older adults in a hospital setting. However, there is no generic way to produce one specific multi-factorial fall prevention programme. A multi-factorial fall prevention programme is diverse, complex and specific to the individual themselves, there is no one size fits all, generic approach to reduce falls.

References

Groarke, A. (2012). Falls prevention: risk assessment and intervention. *Irish Nursing and Midwifery, 20*(5), 37-39. Retrieved March 25, 2015, from CINAHL.

Oliveria, F., Sandos, S., Kerber, N., Francion, F & Cruz, V. (2015, February). Scientific production about the environmental risk factors for falls in the elderly: integrative review. *Journal of Nursing, 9*(2), 759-767. Retrieved March 21, 2015, from CINAHL.

Saravanakumar, P., Higgins, I., Van Der Riet, P., Marquez, J & Sibbritt, D. (2014, August 1). The influence of tai chi and yoga on balance and falls in a residential care setting: a randomised controlled trial. *Contemporary Nurse: A Journal for the Australian Nursing Profession, 48*(1), 76-87. Retrieved March 25, 2015, from CINAHL.

Simpson, J., Rosenthal, L., Cumbler, E & Likosky, D. (2013). Inpatient falls: defining the problem and identifying possible solutions. Part one: an evidence-based review. *The neurohospitalist*, *3*(3), 135-143. doi: 10.1177/1941874412270665.

PICOT MODEL (Whitehead, 2013)

PICOT category	Information relating to question	Explanation
Population	Older adult patients aged 65 and over, who are a falls risk in a hospital setting.	Susceptibility to falls increases with age as body system functions decline leading to impaired balance (Saravanakumar et al., 2014).
Intervention (exposure)	Older adult patients who are a falls risk and who are provided with a multi-factorial falls prevention programme in a hospital setting.	I searched for articles that use an experimental design to determine whether or not a multi-factorial falls prevention programme is an effective way of decreasing falls in older adult patients aged 65 and over in a hospital setting. Experiments will include the use of a multi-factorial integrated falls prevention programme.
Comparison (control)	A hospital setting that does not have a multi-factorial falls prevention programme for older adult patients aged 65 and over who are a falls risk.	I am interested to know if there is a clear comparison between the two hospital settings.
Outcome	There will be a decrease in the amount of falls in older adult patients who are in a hospital setting that uses a multi-factorial falls prevention programme.	Since I am wanting to know if a multi-factorial falls prevention programme is an effective way of reducing falls in older adult patients in a hospital setting.
Time	Over 12 months	Will produce more valid and reliable results by doing the research over a long period of time.

Through the use of the PICOT model I am able to formalise my research question. My formalised research question is: *In older adult patients aged over 65 years, who are a falls risk, does a multi-factorial falls prevention programme decrease the number of falls in a hospital setting, within 12 months?*

Reference

Whitehead, D. (2013). Searching and reviewing the research literature (pp. 35-56). IN Z, Schnider & D, Whitehead (Eds). *Nursing and Midwifery Research: Methods and appraisal for evidence-based practice.* (4th ed). Sydney, NSW, Australia: Mosby Elsevior.

Rationale for using a poster to present my clinical issue of falls prevention.

I have chosen to present my clinical issue of falls prevention in older adults as a poster as it is an informal and interactive way of briefly highlighting how nurses can prevent falls in our ageing population. This poster gives a brief summary of research found during my literature review of the subject. I have used the Ottawa Charter as a means of rationally identifying why I have chosen to use a poster. The Ottawa Charter is an international agreement for health promotion. There are five main areas of action in the Ottawa Charter, these include:

1. Building healthy public policy
2. Creating supportive environments
3. Strengthening community action
4. Developing personal skills
5. Re-orientating health care services toward prevention of illness and promotion of health

I will be focusing on "developing personal skills' in regard to my clinical issue of falls prevention. This concept refers to supporting individual and social development through providing education, information and enhancing skills (World Health Organization, 2015). This poster provides brief information and education for nurses in particular around falls prevention and how a multifactorial and individualised approach is an effective way of reducing falls in older adults in a hospital setting.

Reference:

World Health Organization. (2015). *The Ottawa charter for health promotion.* Retrieved from http://www.who.int/healthpromotion/conferences/previous/ottawa/en/